

DEER HERD UNIT MANAGEMENT PLAN
Deer Herd Unit # 1
(Box Elder)
April 2006

BOUNDARY DESCRIPTION

Box Elder, Tooele, Salt Lake, Davis and Weber counties - Boundary begins at the Utah-Idaho state line and Interstate 15; then west along this state line to the Utah-Nevada state line, south along this state line to Interstate 80, east on I-80 to I-15, north on I-15 to the Utah-Idaho state line.

Subunit 1 A: Consists of the western half of Box Elder county.

Subunit 1 B: Consists of the eastern half of Box Elder county (Kelton - east).

Subunit 1 C: Consists of Tooele, Salt Lake and Weber counties north of I-80 and west of I-15.

LAND OWNERSHIP

In 1992, 1996, 2001, and 2003 the NRO regional wildlife manager and Unit 1 biologist agreed that there was 1,126,260 acres of deer habitat that supported 98% of Unit 1 deer. The deer management plan "Land Ownership" chart for those above years reflected that acreage. In 2006 the DWR Salt Lake office requested that the remaining 2% of the deer habitat (Lakeside, Newfoundland, Wildcat, Hogup and Pilot mountains) be reflected in the below Land Ownership chart. This is an increase of 445,629 acres along with a major change in summer vs. winter acreage.

RANGE AREA AND APPROXIMATE OWNERSHIP

Ownership	Yearlong range		Summer Range		Winter Range	
	Area (acres)	%	Area (acres)	%	Area (acres)	%
Forest Service	0	0	47174	6	25491	4
Bureau of Land Management, Dept Def.	35185	22	57466	8	243074	37
Private	115756	73	638378	84	341858	53
National Park	0	0	2263	<1	0	0
State Institutional Trust Lands, Sovereign	2387	2	17752	2	40309	6
Utah Division of Wildlife Resources	4796	3	0	0	0	0
DWR Salt Lake Office TOTAL	158124	100	763033	100	650734	100

UNIT MANAGEMENT GOALS

Manage for a population of healthy animals capable of providing a broad range of recreational opportunities, including hunting and viewing. Balance deer herd impacts on human needs, such as private property rights, agricultural crops and local economies. Maintain the population at a level that is within the long-term capability of the available habitat to support.

POPULATION MANAGEMENT OBJECTIVES

< Target Winter Herd Size – The NEW short term (five year) objective for 2006 are to

achieve 20,000 wintering deer (13,000 for subunits 1A,1C and 7,000 for subunit B). Historically, the Unit 1 objective has been 24,000 animals. This population target has not been reached since deer management plans have been in place. Therefore, the Division recommends a short term reduction in management objectives to levels that are viewed as obtainable by regional biologists.

Subunit 1 A West Box Elder – The past objective has been 16,000 deer. This number has not been reached since 1988, when a 12 year wet cycle culminated. Over the last 14 years, this area reached a peak population of around 11,000 deer in the year 2000; the population averaged less than 7,000 animals during that period. Based on this population performance, DWR recommends a minimum of 20% reduction to 13,000 animals.

Subunit 1 B- East Box Elder - This area reached and exceeded the 8,000 deer objective in 1999. A severe winter range fire on the Promontory peninsula occurred in 2001 and has reduced carrying capacity by approximately 1,000 animals. Consequently, the short-term objective is reduced to 7,000 deer.

We will recommend revisions of the short term objective if review of habitat conditions or the next range trend monitoring period (scheduled for 2006) indicate that changes are needed.

	Unit 1	Subunit 1A	Subunit 1B
1994-2005 Objective	24,000	16,000	8,000
<u>2006-2011 Objective</u>	<u>20,000</u>	<u>13,000</u>	<u>7,000</u>
Change	-4,000	-3,000	-1,000

- < Herd Composition - Maintain a region-wide three year average postseason buck to doe ratio of 15-20:100.

POPULATION MANAGEMENT STRATEGIES

Monitoring

- < Population Size - Utilizing harvest data, postseason and spring classifications and mortality estimates, a computer model has been developed to estimate winter population size.
- < Buck Age Structure - Monitor age class structure of the buck population through the use of checking stations, postseason classification, uniform harvest surveys and field bag checks.
- < Harvest - The primary means of monitoring harvest will be through the statewide uniform harvest survey. Achieve the target population size by use of antlerless harvest using a variety of harvest methods and seasons. The winter population of 20,000 should result in an expected annual buck harvest of 2,200 when normal conditions occur, but recognize that buck harvest will be above or below what is expected due to climatic and productivity variables. Buck harvest strategies will be developed through the RAC and Wildlife Board process to achieve management objectives for buck:doe ratios.

Limiting Factors (Items which may prevent achieving population objectives)

- < Crop Depredation - Take all steps necessary to minimize depredation as prescribed by state law and DWR policy.
- < Habitat - Two-thirds of the Promontory peninsula critical winter range on subunit 1B burned in 2001. This loss will correspond to a 1,000 deer reduction in subunit 1B's short term objective. Subunit 1A has very little summer range and the DWR's range trend site's indicate that it is in good condition.
- < Predation - Refer to DWR predator management policy.
 - Assess need for control by species, geographic area and season of year.
 - Seek assistance from ADC when deer populations are depressed and where there is a reasonable chance of gaining some relief through a predator control effort. Predator control efforts will be focused just before and during the spring fawning period.
 - Recommend cougar harvest to benefit deer while maintaining the cougar as a valued resource in its own right.
- < Highway Mortality - Cooperate with the Utah Dept. Of Transportation in construction of highway fences, passage structures and warning signs etc..
- < Illegal Harvest - Should illegal kill become an identified and significant source of mortality attempt to develop specific preventive measures within the context of an "Action Plan" developed in cooperation with the Law Enforcement Section.

HABITAT MANAGEMENT OBJECTIVES

- < Maintain and/or enhance forage production through direct range improvements throughout summer range on sub-unit 1A and on winter range portions of the southern Promontory peninsula on sub-unit 1B to achieve population management objectives.
- < Work with private and federal agencies to maintain and protect critical and existing summer and winter range from future losses.
- < Provide improved habitat security and escapement opportunities for deer.
- < Condition of deer winter range (extensive, non-limiting) on subunit 1A, as indicated by DWR range trend surveys.

<u>Year</u>	<u>Mean DCI score for Unit</u>	<u>Classification</u>	<u>Unit-specific DCI score range: Poor</u>	<u>Unit-specific DCI score range: Fair</u>	<u>Unit-specific DCI score range: Good</u>
1996	58	Good	22-36	37-53	54-72
2001	55	Good			

HABITAT MANAGEMENT STRATEGIES

- < Continue to monitor the permanent range trend studies located on subunit 1 A. Increase the emphasis on summer range transect sites.

CURRENT POPULATION STATUS

Year	Buck Harvest	Post-Season F/100 D	Post-Season Buck/100 D	% 3 point or better	Post-Season Population	% of Objective
2002	746	63	13	71	8,000	33%
2003	847	65	12	37	9,000	37%
2004	810	71	17	54	10,500	44%

Duration of Plan

This unit management plan was approved by the Wildlife Board on _____ and will be in effect for five years from that date, or until amended.